

**Amendment to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1.-3. (Canceled)

4. (Withdrawn)

5-7. (Canceled)

8.-17. (Withdrawn)

18. (Canceled)

19.-24. (Canceled)

25. (New) A method for desorbing analyte molecules from a sample presenting surface, comprising:

providing a photon energy absorbing molecule selected from the group consisting of 2,5-Dihydroxybenzoic acid-N-Hydroxysuccinimide ester, alpha-Cyano-4-hydroxycinnamic acid -N-Hydroxysuccinimide ester and 3-Picolinic acid-N-Hydroxysuccinimide ester;

mixing and incubating said photon energy absorbing molecule with a sample solution containing said analytes thereby forming a covalent complex between said analyte and said photon energy absorbing molecule; and

exposing said complex deposited on the sample presenting surface, to a laser source to desorb the analyte or the complex from said surface.

26. (new) The method according to claim 25 wherein said N-Hydroxysuccinimide ester is sulfonated.

27. (new) The method according to claim 25 wherein said photon energy absorbing molecules are immobilized on solid support.

28. (new) The method according to claim 25 wherein said photon energy absorbing molecules are used in combination with additional matrix.